

Research Problem Review 78-21

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# EVALUATING RACIAL HARMONY TRAINING FOR ARMY LEADERS

Roland J. Hart

ARI FIELD UNIT AT PRESIDIO OF MONTEREY, CALIFORNIA

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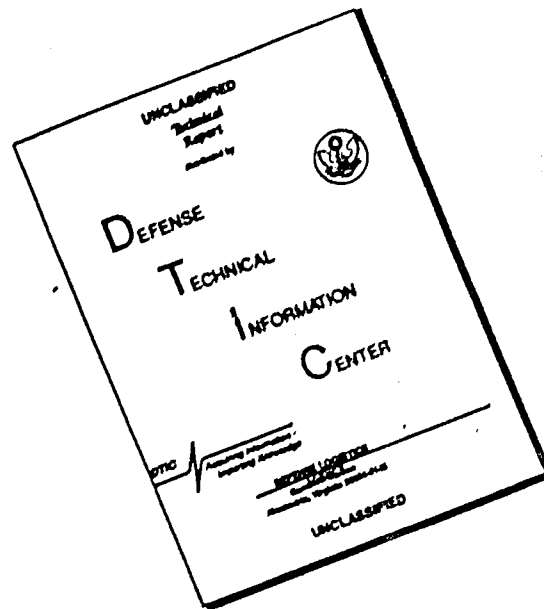
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6 EVALUATING RACIAL HARMONY TRAINING FOR ARMY LEADERS.

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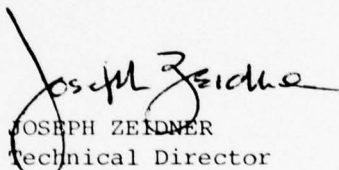
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## FOREWORD

Since 1972, the Army Research Institute (ARI) has been active in research on the policy, operational problems, and programs of the Army's race relations/equal opportunity (RR/EO) program. In 1973, in response to a specific requirement of the Office of Equal Opportunity Programs of the Army, Deputy Chief of Staff for Personnel (DCSPER), ARI initiated the development of a Racial Harmony Training Program for Unit Commanders. The purpose of the program was to improve a commander's skills and effectiveness in handling multi-ethnic problems in his/her unit. This report, the third of three, covers the research involved in the Field Test and Assessment of the Commanders' Training Program. Research Problem Review 78-19, "An Approach to Improve the Effectiveness of Army Commanders in Multi-Ethnic Settings," described the development of the program. Research Problem Review 78-20, "Racial Harmony Training for Company Commanders: A Preliminary Evaluation," described the preliminary field tests of the training program. The research was conducted under Army Project 2Q763744A769, "Army Contemporary Issues Development," in the FY 1976 Work Program, by the ARI Field Unit at Presidio of Monterey, Calif., from June 1975 to January 1977. The Army's equal opportunity research program has been conducted at the Presidio of Monterey Field Unit since 1974.

  
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## EVALUATING RACIAL HARMONY TRAINING FOR ARMY LEADERS

### BRIEF

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#### Requirement:

*THIS REPORT*

to evaluate the effectiveness of two racial harmony training courses for unit leaders, one for company commanders and the other for first sergeants. Both courses were designed to help unit leaders fulfill their responsibilities in the area of race relations and improve the level of racial harmony within their own units. The commanders' course included a rather traditional race relations curriculum, whereas the first sergeants' course focused on increasing communication within the chain of command.



#### Procedure:

An evaluation experiment was designed to test the effectiveness of these training programs and measure the impact of these programs on the level of racial harmony within the companies. Forty-five participating companies were randomly assigned to one of four experimental conditions: whether or not the commander and the first sergeant had received training. Surveys were conducted in the participating companies 2 months following the training, among both company leaders and low-ranking enlisted soldiers from different racial groups. Records relating to the administration of discipline were also collected.

#### Findings:

At the conclusion of training, first sergeants reacted much more favorably to the training they had received than the commanders did to theirs. In contrast, however, the survey data collected 2 months after training indicated that a modest favorable effect could be attributed to the commanders' training but not to the first sergeants' training. Commanders who had been trained felt that (a) race relations seminars in their companies were more worthwhile, (b) discipline was better, and (c) their own racial policies were more favorable, than did commanders who had not been trained. Apparently the trained commanders had taken some positive action in the area of race relations, since enlisted soldiers subordinate to the trained commanders expressed the following positive changes: (a) Trained commanders were more effective in leading race relations seminars, (b) seminars under trained commanders were more worthwhile, (c) soldiers expressed less hostility to trained commanders,

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and (d) soldiers expressed greater willingness to follow trained leaders into a dangerous battle zone. Neither training program influenced the administration of military justice.

#### Utilization of Findings:

The Commanders' Training Program has been made available to a number of installations upon request. The 4-hour module dealing with communications skills has been provided to Headquarters of the Army Training and Doctrine Command (TRADOC), has been adopted as a part of the 7th Infantry Division Discussion Leader's Course, and has been included in the Phase II curriculum for Army Equal Opportunity program managers at Defense Race Relations Institute, Patrick Air Force Base, Fla. The Chain-of-Command Action Plan has been requested by and used at a limited number of installations, apparently with good results.

## EVALUATING RACIAL HARMONY TRAINING FOR ARMY LEADERS

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## EVALUATING RACIAL HARMONY TRAINING FOR ARMY LEADERS

### INTRODUCTION

In the late 1960's and early 1970's, the U.S. Army, along with the civilian sector, experienced increased racial confrontation. In 1971, the Army established an extensive race relations training program in response to the social climate of the times. This race relations training program has continued, and at present there is a requirement throughout all Army installations that soldiers in a given company attend monthly race relations seminars to meet the objectives of this training program. (A company is a basic unit of Army organization consisting of approximately 200 soldiers who work together.)

This massive race relations education and training program was an almost unprecedented effort by a large institution to address, through education and training programs, serious racial problems that have existed for centuries. In many ways this effort has been pioneering, and the Army has had to adopt a "learn by doing," bootstrap approach to effective training. Since there was little information about the most effective methods in race relations training, the Army had to develop a training program based in part on intuition and trial and error, which has not always resulted in high-quality training. Most company commanders themselves have received very little race relations training, but they nonetheless are responsible for implementing the training program within their own units. This situation--in which the person responsible for implementing the training has had little training himself--can have an obvious deleterious effect on the quality and frequency of training.

Since 1975, company commanders have been responsible for implementing the race relations training program in their own companies. A recent evaluation of the current Racial Attitudes and Perceptions (RAP) training program revealed that less than half the companies actually conduct monthly race relations seminars, and of the companies that do, many discuss miscellaneous complaints besides racial issues at RAP seminars. In practice, only low-ranking enlisted soldiers attend race relations seminars, while officers and noncommissioned officers (NCOs) avoid attendance (Hiett & Nordlie, 1976).

Different approaches to training company leaders have been explored, in an attempt to improve training quality as well as to improve the level of racial harmony in the companies. A racial harmony training program was developed for company commanders, and a different training program for first sergeants. (A first sergeant is the senior NCO in a company, responsible for administration and assisting the commander in implementing policies.)

Different approaches were used in developing the commanders' and first sergeants' training programs. The purpose of this paper is to describe the development, similarity, and differences of both the commanders' and first sergeants' training programs. An evaluation experiment is described in which the effectiveness of the two training programs were tested. The effectiveness of each training program is then compared.

#### Racial Harmony Training for Commanders

The original racial harmony training program for company commanders was developed in 1973 (Thomas, McNeill, & Laszlo, 1978). To assist with the curriculum development, 42 company commanders and 104 enlisted soldiers were interviewed at six sites within the continental United States and overseas, in order to obtain relevant material for the commanders' curriculum and insure that the curriculum addressed important race relations issues in the Army setting. After the 36-hour curriculum was developed, it was presented four times to classes totaling 36 company commanders at two posts in the southern United States. Two teaching approaches were used: (a) a rational presentation of facts and evidence, and (b) a nondirective approach based more on listening and suggestion than a direct presentation of information. In this preliminary work, neither teaching approach seemed clearly superior with all commanders and all curriculum topic areas, so that with further presentations trainers used the approach that seemed most effective in a given situation.

The pretraining interviews with commanders and enlisted men, and field trials of the curriculum with company grade officers, revealed several individual and organizational constraints reducing involvement of officers with race relations/equal opportunity (RR/EO) efforts. The content and instructional methods of the training course represented attempts to deal with some of these constraints, including these:

1. Underestimation of the frequency of discrimination,
2. Attributing discrimination primarily to civilians,
3. Explaining racial conflict as a product of minority group deviance,
4. Perceiving more cost than benefit for involvement in RR/EO efforts, and
5. Interpreting RR/EO efforts as counter to Army norms necessary on maintenance of discipline.

The original 36-hour commanders' curriculum was next modified in the following ways:

1. The curriculum was reduced from 36 to 20 hours so that commanders would not need to spend so much time away from their units;
2. The practical exercises in the course were modified to make them more accurately reflect the realities of Army life in the unit; and
3. A 4-hour block of instruction was added to the curriculum designed to teach commanders techniques for leading small group discussions. This block of instruction was added to assist commanders in handling race relations (RAP) seminars in their own companies.

These modifications produced a 24-hour (3-day) workshop (Laszlo, McNeill, & Thomas, 1978).

In the final 3-day workshop, topics of instruction included the following:

1. Ethnic minority history covering Black Americans, Chicanos, and Puerto Ricans;
2. The commander's role in his company in working to improve race relations;
3. Guidelines to commanders for improving relations between members of majority and minority groups;
4. Interpersonal "games" played in an Army context;
5. Institutional discrimination;
6. Prejudice and stereotypes;
7. Role expectations blacks and whites have historically had for each other;
8. Identification of racial tension in companies and techniques for alleviating it; and
9. Techniques for leading small group discussions to assist commanders in handling RAP seminars in their own companies.

The course outline listing each of the topics covered for the commanders' curriculum is given at Appendix A.



A preliminary evaluation of the commanders' workshop was conducted at a Midwestern installation (Laszlo, McNeill, & Thomas, 1978). This evaluation was based on the revised curriculum that had been reduced to a 3-day workshop. However, this particular evaluation did not include the final topic: techniques to help commanders lead small group discussions. To evaluate the effectiveness of this training with an appropriate experimental design, the training was presented to 19 company commanders who were assigned to an experimental group. Seventeen other commanders were assigned to a control group. Immediately after training, commanders in both the experimental and control groups completed tests measuring knowledge and skills acquired in race relations; 45 days after training, enlisted soldiers, key subordinates, and the commanders themselves completed surveys, evaluating the commander and the unit in race relations. Records of several classes of administrative action including Article 15's, administrative discharges, and courts martial were also obtained for this period.

A primary concern among commanders in the training class itself was coping with the realities of the Army as an institution, including its values, communication norms, and styles of resolving conflict, and not simply learning more about ethnic groups. Commanders seemed to respond favorably to those portions of the course that touched on values in the Army, patterns of communication, methods for resolving conflict, inconsistencies in what is expected of commanders--in other words, institutional issues.

The results of this preliminary evaluation experiment were traced from the initial effect of the training on (a) the knowledge and skill gained by the commanders themselves, to the effect of the training on (b) programs that the commanders felt motivated to implement in their companies, to the final effect of the commanders' training on (c) perceptions and feelings of enlisted soldiers in the companies. In terms of the first measures of training effectiveness--the comprehension of the facts and ideas presented in the course--significant differences were demonstrated between the experimental and control groups. Commanders exposed to the training program demonstrated more knowledge of the facts, methods, and skills needed to diagnose and analyze interpersonal relations and to deal with interracial issues in a military unit than did commanders not exposed to training. With the second measures of training effectiveness--commanders' willingness to enact race relations programs in their own units--favorable changes in programs were not found. With the third group of measures of training effectiveness--race relations with the unit--the findings were more encouraging. Enlisted soldiers reported that their commanders from the experimental training group (a) implemented more policies to insure racial harmony, and (b) were more effective in dealing with racial problems, than soldiers' commanders not exposed to the experimental training. The measures of administrative action did not reflect the effects of training.

The results of this preliminary evaluation could not be considered conclusive in any sense because of some fairly serious problems encountered in implementing the experimental design. For one thing, the experimenters were unable to make the experimental and control groups equivalent through randomization. The identified differences between the experimental and control group could have been due to the nonrandom selection of commanders for training. Also, the random selection of enlisted soldiers to take the post-training survey provided some latitude for units to select their own enlisted survey participants on a nonrandom basis, which could have created a bias if leaders in the experimental companies felt motivated to send only their "good troops" to take the survey. The training itself took place in one 3-day workshop, with one set of instructors and one group of commanders. The training effects noted could have been strictly due to something unique about this particular class, either the instructors, commanders, or type of interaction that occurred in this one class that might not apply in other classes. More rigorous evaluation of the training program was needed to provide firm conclusions about its effectiveness.

#### Racial Harmony Training for First Sergeants

The approach to racial harmony training given to first sergeants was contained in the Chain-of-Command Action Plan (COCAP) developed by Tucker (1975a). Tucker based COCAP on his experiences as a Race Relations/Equal Opportunity NCO at the U.S. Army Garrison, Yongsan, Korea, between April 1971 and April 1973; during this period, there was racial turmoil, rioting, and fighting between black and white soldiers in Korea, particularly in the Korean communities surrounding Army installations (Tucker, 1973). As a race relations NCO, Tucker responded to this serious racial unrest by developing procedures similar to those later formalized in the Chain-of-Command Action Plan.

COCAP has been implemented by presenting a 1-day workshop to first sergeants (Tucker, 1975a). As its name implies, the Plan is designed to provide the chain of command in the Army with the tools necessary to solve their own problems, primarily by increasing open communication between superiors and subordinates throughout the hierarchy. COCAP's objective is to afford a method for bringing troop dissatisfaction to the surface in time to allow leaders to respond to the enlisted soldiers' grievances, before they escalate into more serious forms of conflict. This plan was designed to build enlisted soldiers' confidence and trust in the chain of command as a problem-solving agency by increasing upward communication within the chain of command. Orders and direction are often given from superiors to subordinates, but superiors seldom receive feedback from subordinates about the impact these orders have on enlisted soldiers. Enlisted soldiers often see communication within the chain of command as a one-way street.



To increase two-way communication, first sergeants were asked to hold seminars, first with the first-line supervisors (platoon sergeants, squad leaders) who have direct contact with troops, and then with enlisted soldiers. In these seminars, first-line supervisors (E5-E7) were asked to periodically interview enlisted soldiers (E1-E4), using appropriate techniques to uncover problems, and enlisted soldiers were shown techniques for providing honest feedback to interviewers, even when it became apparent that supervisors didn't really want to do the interviewing. First sergeants were given instructional materials for teaching the seminars to first-line supervisors and enlisted soldiers; these materials included information about the negative impact of racial discrimination on the morale and effectiveness of their companies. Racial discrimination was treated as one of a number of leadership deficiencies, each of which was likely to produce feelings of rejection among enlisted soldiers, and with those feelings in turn apt to create unrest and dissatisfaction in the company. Programs of instruction (POI) for first-time supervisors (E5-E7) and enlisted soldiers (E1-E4) are provided in Tucker (1975b). Brief lesson outlines of the POI's for both supervisors and enlisted soldiers are presented in Appendix B.

COCAP was initially implemented in several companies in a signal battalion in Korea, with several other companies in another signal battalion serving as a control group. COCAP was next implemented at a southern United States installation in three companies, with a fourth company as a control group (Tucker, 1974). After COCAP was implemented at these locations in both experimental and control companies, surveys were conducted. COCAP was initially implemented at these locations to further develop the program, to get a rough idea about its effectiveness, and to eliminate any difficulties encountered during implementation. Too few companies were involved with these initial tests of COCAP to get any definitive information about the effectiveness of the program from survey data. However, enlisted soldiers in the experimental companies that received COCAP, and also in the control companies that did not, completed a survey in which they expressed their feelings about the racial climate both before and after implementation of COCAP. Although attitude changes appeared to be in a favorable direction, because of the small sample sizes these differences could have easily been due to chance; and because of the lack of appropriate experimental design, including the lack of random assignment of companies to experimental and control groups, the differences observed could have been due to causes other than training effects.

Participant observation, however, by Tucker and others suggested that COCAP might be an effective approach to training first sergeants and enlisted soldiers in racial harmony and increasing open communication. For this reason it was concluded that the program deserved further evaluation in a more scientifically rigorous design. If the plan proved to be effective after further evaluation, it might be safely implemented on a wider scale in the Army.

### Comparison of the Commanders' and First Sergeants' Programs

In many ways the company commanders' and first sergeants' training programs were different, even though both had the purposes of increasing the unit leaders' skills in race relations and improving the level of racial harmony in the unit. The approach that each program took was quite different. The commanders' program used a rather traditional instructional approach, presenting a specially developed race relations curriculum to commanders in a 3-day workshop. The curriculum was not designed to be confrontational in the sense of challenging the commanders' values and beliefs. But it was designed to encourage commanders to examine the uses and abuses of power with respect to race relations from an historical perspective; to examine their own use of authority within the Army system, including examining their own treatment of subordinates; and to examine the values, norms, etc., of the Army as an institution, with regard to race relations. Commanders were often placed in the role of examining themselves and the institutions of which they were a part. This sort of role was somewhat uncomfortable and produced some defensiveness and hostility toward instructors and the curriculum, even though the curriculum itself was fairly bland and not designed to provoke hostility. This uncomfortable response on the part of commanders was probably more attributable to the role of self-examination that commanders were placed in than to the specific content of the curriculum or the presentation style of instructors.

By contrast, first sergeants were placed in the role of model leaders with the COCAP program, teaching their subordinates about the deleterious effects of poor leadership practices, including racial discrimination. Any discrimination on the part of the first sergeants themselves was expected to be reduced by having them take this model leader role. First sergeants were not asked to examine their own values or use of authority or to examine the values or uses of authority of the institutions to which they belonged, but instead were asked to reaffirm the leadership principles and institutional values that they already accepted and to live up to these values more fully. Asking first sergeants to take this model leader role and to reaffirm institutional values and live up to them more fully tended to elicit favorable responses from first sergeants rather than the defensiveness and anger that was sometimes elicited with the commanders' curriculum. Commanders were asked to examine their roles and the role of the Army in the area of race relations and were not asked to assume the role of a model leader and reaffirm their already accepted values.

These contrasting roles played by commanders and first sergeants in their respective training programs are relevant to an understanding of the results of the evaluation experiment, described later in this paper. Since previous evaluations of both the commanders' and first sergeants' training programs were preliminary, with inadequate experimental design, no definitive conclusions about either program's

effectiveness could be made. For this reason, another evaluation experiment was designed and implemented to provide a method for testing the effectiveness of each program separately, as well as a method for comparing the effectiveness of the two programs. This final evaluation experiment is discussed below.

## METHOD

### Design of Evaluation Experiment

In this project, both racial harmony training programs, for commanders and first sergeants, were evaluated in a single experimental design in which the company was the unit of analysis. Each company has a company commander and a first sergeant, and enlisted soldiers subordinate to them. In all, 45 companies from two Army installations participated in the evaluation project; all but 4 of these companies came from the larger of the two installations. These 45 companies were drawn from five major commands (brigade-size units) at the two installations.

The participating companies were randomly assigned to one of the four experimental conditions shown in Table 1. The sampling procedure was stratified by major command, so that the companies from each major command were approximately equally distributed across the four experimental conditions.

Table 1

Design of Evaluation Experiment

		Company Commander Training	
		Trained	Not Trained
First Sergeant Training	Trained	11	11
	Not Trained	11	12

Note. The numbers in each box reflect the number of companies assigned to each of the four experimental conditions.



As Table 1 indicates, the training courses were evaluated in a common 2 x 2 experimental design, with companies as the unit of analysis. In this design, 11 companies were randomly selected to receive the experimental treatment of training both the company commanders and the first sergeants. In 11 other randomly selected companies, the company commanders were trained but the first sergeants were not. The reverse was true in 11 other companies, with the first sergeants trained but the commanders not trained. In the final 12 companies, neither the commanders nor the first sergeants were trained. This experimental design allows us to determine whether each program by itself was effective and then to compare and contrast the effectiveness of each program. The design also allows us to determine whether there was an "interaction" between programs. For example, an interaction between programs could occur if the programs were especially effective when they were presented together, with both commanders and first sergeants receiving training.

The company commanders and first sergeants--all male--were trained between 25 August and 3 September 1975. In the participating companies at this time, 1 commander and 15 first sergeants were black. The commanders were all trained in the same class, in one consecutive 3-day workshop, by the same four instructors, each of whom was an active duty soldier who had been trained as a race relations instructor at Defense Race Relations Institute (DRRI). The instructors also had attended a special 1-week workshop conducted by the authors of the commanders' curriculum (see Laszlo, McNeill, & Thomas, 1978) designed to familiarize the instructors with the curriculum and effective ways to teach it. The instructors made a multiracial team: one black, one white, and two Hispanics. Three were officers (O2, O3) and one an NCO. The first sergeants' training was conducted in a single 1-day workshop. The instructor was Sergeant First Class Tucker, who had originally developed this approach to training (Tucker, 1975a).

#### Dependent Variables

The selection of criteria to measure the effectiveness of the training programs, as well as the selection of the groups of soldiers that the training programs are supposed to have a positive effect upon, is an important part of the design of the evaluation experiment.

To be considered effective, the training programs outlined here should have a favorable effect not only on the leaders who were trained but also on the subordinates within their companies. This favorable effect on leaders and subordinates should last and be measurable over a number of months in order for the training programs to be practical. For this reason, measures of training effectiveness were taken from both the unit leaders themselves and from enlisted soldiers within their units over a period of months. Enlisted soldiers were considered to be the primary criterion group upon which the programs' effectiveness

were to be based. One of the main purposes of training commanders was to improve the level of racial harmony in the units, particularly among enlisted soldiers. It was important to determine the programs' effectiveness among soldiers from different racial groups, particularly among the largest groups--black, white, and Hispanic. The effectiveness of the programs among male and female soldiers was not examined in this study, since women were found in only a few of the participating companies. Most of the participating units were combat units from which women are barred by law.

Survey Data. Two surveys were conducted, at the end of October 1975 (2 months after training) and at the end of January 1976 (5 months after training). The October 1975 survey was completed by the company commanders, first sergeants, and 14 randomly selected enlisted men from each of the participating companies. The sampling was stratified by race so that six white, five black, and three Hispanic enlisted men were selected from each company. The Hispanic category was approximately 60% Mexican American and 24% Puerto Rican.

The commanders and first sergeants completed the January 1976 survey along with a different random sample of enlisted men selected from participating companies. The enlisted men were selected for the second survey following the same sampling plan, as in the first survey. The survey completed by both unit leaders and enlisted soldiers was fairly extensive, usually taking leaders just under an hour to complete and enlisted soldiers just over an hour to complete. The survey for leaders and the one for enlisted soldiers contained identically worded questions for many items, although some questions were phrased somewhat differently for leaders and enlisted soldiers (see Tables 8 and 9 in the Results section). Survey items that were relevant for measuring effectiveness of the training programs were selected for analysis. (Tables 8 and 9 list the dependent variables, from the leaders' and enlisted soldiers' survey, that were used to evaluate the training programs.) Enlisted men were given an opportunity to rate their commanders' effectiveness in race relations on the survey, as well as the frequency and quality of the monthly RAP seminars. On one scale they could express hostility toward their leaders if they desired, and on another they rated the level of discipline in the unit. Commanders could express hostility toward black and white enlisted soldiers if they desired to do so, as well as rate their own effectiveness in race relations. Commanders also rated the quality of racial harmony and discipline in their own units, along with a variety of other dependent variable measures.

Survey Scales. The four scales shown in Tables 8 and 9 were included in both the survey for commanders and the one for enlisted soldiers. The nature of each of these scales can be summarized briefly at this point.



The scale labeled Race Relations Policies Scale was composed of the items shown in Section I, Appendix C. The Race Relations Policies Scale was developed originally by Laszlo, McNeill, and Thomas (1978) for use in the preliminary evaluation of the racial harmony training program for commanders. The items were developed to measure relevant aspects of a commander's race relations policies in his own company. Initial work with this scale appeared encouraging. The original 9-item scale was reliable. The alpha coefficients from three different groups of respondents who completed the scale were .74, .94, and .88, indicating that the scale had substantial reliability. Five of the original nine items were selected for inclusion in the present survey instrument. Commanders and first sergeants rated themselves on these five items, and enlisted soldiers rated separately both their company commander and their first sergeant on these items.

The scale labeled Hostility Scale was composed of the 11 bipolar ratings shown in Section II, Appendix C. Unit leaders and enlisted soldiers were asked to rate different persons on the same 11 items. Enlisted soldiers rated separately both their company commander and their first sergeant on these items, and the unit leaders were asked to rate separately both the white and black enlisted men (E1-E4) in their own companies. Respondents were asked first to think about the behavior of the person(s) in question, and then asked, "What does their (his) behavior make you feel like doing to them (him)?" The respondents answered by making the ratings shown in Section II of Appendix C. The 11 response items were selected to allow soldiers the opportunity to express either positive or hostile feelings toward their superiors and to allow superiors to express positive or hostile feelings toward their subordinates, if they so desired.

A short Value Survey was included in which soldiers ranked seven values in order of importance to themselves, using the general procedure given by Rokeach (1973). The seven values that were included in this survey were these:

1. A Sense of Accomplishment,
2. Authority,
3. Equality,
4. Love,
5. Obedience,
6. Success, and
7. True Friendship.

Five of these seven items were selected from the Rokeach Value Survey (1973). For purposes of evaluating the training programs, the researchers were primarily interested in the priority soldiers placed on the one value, Equality. Rokeach (1973) has provided evidence of a positive relationship between the priority that is placed on the value Equality, and other behavior that is indicative of good race relations. The

researchers wished to see whether or not the training programs would increase the priority that soldiers placed on Equality.

The scale labeled Unit Discipline Scale was composed of the 12 items shown in Section III, Appendix C. These discipline items were developed as part of research on measuring the concept of discipline in an Army context using survey methods (Bauer, Stout, & Holz, 1976). Bauer et al. developed discipline questions to tap concepts about both positive and negative aspects of Army discipline that previously had been identified in interviews with soldiers from diverse groups. Non-metric factor analysis reduced 16 discipline items into a smaller number of underlying dimensions or factors. Three factors were identified and labeled, as follows:

1. Unit Performance,
2. Unit Conduct, and
3. Unit Appearance.

However, it was noted that all questions in the Unit Conduct Scale were negatively worded, and all questions in the Unit Performance and Appearance Scales were positively worded. In other words, the response "To a very great extent," implied poor conduct on the Conduct Scale while the same response indicated good performance or appearance on the other two scales. This raised the possibility that the conduct factor was due to response bias, i.e., soldiers' response to the positive or negative wording of the question rather than to the question content. In the present study, questions were rephrased so that approximately half of the conduct, performance, and appearance items were worded positively and half negatively. With this approach, the question wording did not correspond with the previous three factors. All questions associated with a given factor were not worded one way.

Twelve of the original 16 items--ones that had the highest loadings with the original factor they had been grouped with--were selected for inclusion in the present survey. Factor analysis (principal factor solution with varimax rotation) was used to reduce the dimensionality of these 12 items. Only two factors in this analysis accounted for a substantial portion of the variance: one factor that consisted of positively worded items and another factor that consisted of negatively worded items. These results indicate that the separate factors, in this study at least, and probably in the previous one (Bauer et al., 1976), were due to nothing more than response bias. At least the distinction between conduct and performance is probably due to response bias. The concept of discipline, as measured by the 12 items that were selected, appeared to be essentially an undimensional construct when response bias was ignored; hence, in this case all 12 items were treated as a single scale that was labeled Discipline Scale.

Evaluation Exercise. Just before the October survey was finished, commanders and first sergeants completed a brief evaluation exercise designed to measure whether or not the leaders' approaches to handling the problems of enlisted soldiers had changed following training. We were also interested in seeing whether leaders' reactions to white and black soldiers changed after training. These leaders were given three standard Army disposition forms, which briefly summarized biographical characteristics of three soldiers (trainees). The trainees were ostensibly to be assigned to the Special Training Company for a special reading training program, designed to raise their reading level from the currently substandard fifth-grade level that they had attained on reading tests. Two of the three trainees were indirectly identified as being white by the name selected for the form. The third was indirectly identified as being black by the name selected for him, and he was further identified as having a "shaving profile"--a medical condition (largely unique to blacks) that means the Army allows them to have short beards. As dependent variables, leaders were asked to recommend the type of training conditions that each trainee should encounter in this program, as well as whether the trainee should be given an early administrative discharge from the Army under the Training Discharge Program that would allow him to receive an honorable discharge.

Specifically, leaders made recommendations about (a) the duty detail that each trainee would have throughout the special reading training course, from time-consuming and undesirable duties to less time-consuming and more desirable duties; (b) the frequency with which the trainee would receive "high-stress physical training" (vigorous physical exercise); and (c) the frequency with which the trainee would receive "high-stress emotional training" (vigorous criticisms by drill instructors). Leaders also rated the time that they would have available (if any) to interview trainees before making the discharge recommendation and the final discharge recommendation they felt they would probably make after receiving more data. These variables were designed to measure, somewhat indirectly, the concern that the leaders would show for each trainee. Leaders were not told that their recommendations were for hypothetical people until after they made the above ratings. They were fully debriefed and told that they did not need to turn their ratings in if they did not wish to do so. All leaders turned in the ratings.

Records of Administrative Action. Also as part of the evaluation phase of the project, record data were collected for a 6-month period--1 August 1975 to January 1976. Included as part of this record data was information on the frequency of Article 15's, administrative discharges, and police apprehension rates taken from military police reports.

Article 15's are punishments imposed by the company commander in informal judicial proceedings, often upon the recommendation of the first sergeant or other noncommissioned officer, for offenses that are not serious enough in the commander's judgment to warrant court martial.



A soldier can either accept the punishment imposed by the Article 15 or face formal judicial proceedings (court martial). In the 6-month period in question, Article 15's outnumbered courts martial 20 to 1 in participating companies.

Administrative discharges are used to separate a soldier from the service before the normal term of enlistment ends. Discharges are used to eliminate from the service soldiers who seem to be creating problems or seem unable to adjust to the requirements of Army life. A soldier can be discharged under either honorable or less-than-honorable (general, undesirable, bad conduct, dishonorable) conditions.

Apprehension rates taken from military police reports were for all categories of offenses, from traffic offenses to drug offenses, burglary, shoplifting, and AWOL (absence without leave).

The above records of administrative action were included in the evaluation design to see whether or not these training programs would influence the administration of punishment and discharges to black and white enlisted soldiers or influence the offense rates of the same soldiers. These measures of administrative action reflect the actions of both the leaders and their subordinates; we were interested in seeing whether the previous training programs would influence these measures.

#### Implementation of the Evaluation Design

Random Assignment. In practice, it is often difficult to actually implement the requirements for randomization in a field experiment; random assignment interferes with the operational requirements of an ongoing organization. In the present case, the researchers were successful in randomly assigning unit leaders to each of the four experimental conditions shown in Table 1, with the exception of three leaders who had to be reassigned from their initial training condition because of operational requirements of the Army at that time. The possible bias thus introduced is not known, but it probably was not substantial. The second random sampling requirement in this evaluation experiment was the selection of enlisted men (stratified by company and by race) to take the survey given in October 1975 and January 1976. A different random selection of soldiers was given the survey in January 1976. Again, this sampling requirement was largely met.

For the October survey, enlisted personnel were randomly selected by the researchers from company personnel rosters. Enlisted men took the surveys in groups. If they failed to attend the initial survey, they were requested (through the first sergeant) to attend one of several make-up sessions provided for all units. A list of randomly selected alternates was provided to each company to replace soldiers who had been selected to take the survey but had left the unit before the

survey, or who had bona fide reasons for not attending. Soldiers were selected for the survey 4 to 6 weeks before the survey, so that 14% of the soldiers in this original sample were no longer in the company by the date of the survey; these were replaced by the randomly selected alternates. In fact this produced a random selection of not all enlisted soldiers in a unit, but all soldiers who had been in their units at least 4 to 6 weeks. Virtually all (99%) of the total number of enlisted men requested actually took the survey. However, another 14% of the total number of enlisted men requested were assigned to their units during the time of the survey but did not take it for one reason or another and were replaced by randomly selected alternates. To document any bias that may have been introduced, the reasons for nonattendance for this 14% nonattending group were computed as follows: (a) 2% did not attend because they were sick or in the hospital; (b) 2% did not attend because they were in school during the times of the survey; (c) 3% were on leave during survey times; (d) 1% was AWOL; (e) 1% were in jail at the time; (f) 2% had duty (often guard duty) which precluded attendance; and the rest simply did not show up. Because the reasons for nonattendance were varied, the bias introduced by this 14% nonattending group does not appear to be systematic or substantial. The attendance of 86% of soldiers requested by name, who were still in the unit at the time, is about as good as can be attained in a military environment.

In the previous preliminary evaluation of the commanders' training program, the inability of the researchers to randomly assign commanders to the experimental and control groups, and their inability to control the selection of the enlisted soldiers sent to take the evaluation survey, posed serious threats to the validity of any conclusions that could be reached about the effectiveness of the commanders' training (Laszlo, McNeill, & Thomas, 1978). Conclusions were limited in the preliminary study because more rigorous sampling procedures could not be implemented. However, these sampling problems were overcome in the present evaluation experiment, so conclusions here are not thereby constrained or limited.

Leader Turnover. One unexpected problem encountered in implementing the experimental design had a variety of ramifications for the design. This problem involved an unexpectedly high turnover (reassignment) rate among the company commanders and first sergeants in the participating companies during the 5-month period following the training in late August 1975. To examine the impact of the leaders' training programs when some leaders were reassigned and no longer in their units, it was necessary to include the turnover rate as a factor in the data analyses so that the effects of this variable could be estimated. For statistical reasons, the high turnover rate precluded the use of all the survey and administrative record data that had been collected. For data analyses, the turnover rate among unit leaders had to be added as a factor to be examined along with the effects of the training programs. It was possible to add a turnover rate factor to the analysis covering the



turnover rate for unit leaders (either the commander or first sergeant) through the end of October 1975 (2 months after training), but it was not possible to add another level to this factor by looking at the turnover rates through January 1976, due to the small sample size and high turnover rates through January 1976. Table 5 in the Results section shows the number of companies with turnover through October 1975. The turnover factor in all later analyses involved two levels only--no turnover among unit leaders through October versus turnover among either or both leaders through October.

This turnover problem precluded the use of the January 1976 survey data, for program evaluation purposes and precluded the use of the record data that had been collected for some of the later months. It was not possible to examine the impact of the training programs as long as 5 months after training, when many of the leaders had already been reassigned. The effects of this turnover could not be effectively examined statistically as long as 5 months after training because of sample size problems. Analyses of Article 15 and military police report data were limited to administrative actions for only the 2 months following the training (September and October 1975), and analyses of the administrative discharge data covered these actions for 4 months following training (September through December). Data for administrative discharges were examined for 4 months, primarily because of the lower frequency of these actions and the time delays often involved between the time an action is initiated and the time the discharge actually takes place (and shows up on the record data).

The "extra" survey and record data collected after October 1975 have been put to good use, since these data provide the basis for a variety of subsequent studies, evaluating RAP training, crime and punishment, etc., using cross-lagged panel analyses.

Single Class Presentations. One limitation with the design of this evaluation experiment is that the results are based on a single class presentation of the curriculum to commanders and a single presentation to first sergeants. The instructors and leaders remained the same during these presentations. We wish to generalize results to other instructors and classes, but the fact that these factors were replicated only once makes it difficult to do so. There may have been something unique about the class or the instructors that produced the observed results. The commanders' curriculum, however, has been presented several times with different instructors and classes, and a preliminary evaluation of this program provided moderately encouraging results (Laszlo, McNeill, & Thomas, 1978); hence, if the program looks effective in the present evaluation, it may not be necessary to limit any generalizations to the particular class it was given to. From a research management point of view, it was impossible to replicate classes, or instructors, for the current program evaluation experiment.

### Statistical Analyses

The data from this evaluation experiment were analyzed, using analyses of variance. Two basic analysis of variance designs were used throughout. The analysis of variance design is partly determined by the number of the independent variables to be entered into the analysis. Three independent variables that were entered into all analyses were (a) commanders' training, (b) first sergeants' training, and (c) turnover rate among either unit leader. A fourth independent variable, the enlisted soldiers' race, was added for analyzing enlisted soldiers' survey responses, and administrative record data. There were two levels for the commanders' training factor, trained versus not trained; two levels for the first sergeants' training, trained versus not trained; two levels of the turnover factor, some turnover among unit leaders (either the commander or first sergeant or both) versus no turnover; and three levels of the factor reflecting the enlisted soldiers' race--black, white, and Hispanic.

A three-way factorial analysis of variance design was used when the first three factors were analyzed, and a four-way, split-plot (or repeated-measures) analysis of variance design was used when the race factor was added. The race factor was added as a repeated-measures factor (i.e., one having repeated observations of the same unit of analysis). Since the company was the unit of analysis, the race of the enlisted soldiers within each company involved a repeated observation about the same unit of analysis. The enlisted soldiers' survey responses for each company were averaged by race (black, white, or Hispanic), and these averaged responses were the dependent variables. Since the unit of analysis is the company, when company leaders are trained, the average enlisted response in a company (by race) is appropriate as the dependent variable, instead of the individual responses of the enlisted soldiers within a company.

Table 2 outlines the two analysis of variance designs with their appropriate error terms. Each term in the design (except for error) has an F ratio associated with it. The term indicates the particular comparison that is being made, and the F ratio indicates whether or not the observed differences between means for the different levels of the term can be considered due to chance. Statistically significant differences are those that can be considered due to the independent variable rather than chance.

Analysis of variance designs are usually balanced in the sense of having an equal number of observations in each cell of the design. We started out with a nearly equal number for each cell (see Table 1); however, the addition of the turnover factor produced unbalance (unequal N per cell) into the design. Analyses were never unbalanced across the repeated-measures factor of race, as black, white, and Hispanic observations were available in all cases. There are several ways the variance can be partitioned with unbalanced analyses of variance,

Table 2  
Two Analysis of Variance Designs<sup>a</sup>

Term	df	F
Commanders' Training (A)	1	
First Sergeants' Training (B)	1	
Turnover (C)	1	
A X B	1	
A X C	1	
B X C	1	
A X B X C	1	
Subjects within groups (Error) <sup>b</sup>	37	
<hr/>		
Enlisted Soldiers' Race (R)	2	
B X R	2	
C X R	2	
A X B X R	2	
A X C X R	2	
B X C X R	2	
A X B X C X R	2	
R X Subjects within groups (Error) <sup>c</sup>	74	

<sup>a</sup>The three-way factorial design consists of the terms A, B, C and their interactions, including the subjects within groups error term. The four-way, split-plot (repeated measures) design consists of all terms listed in Table 2 above.

<sup>b</sup>The terms A, B, and C with their interactions are tested by the subjects within groups error. This error is sometimes called the whole-plot error in split-plot designs.

<sup>c</sup>The R term as well as the interactions with the R terms are tested by the R X Subjects within-groups interaction. This error term is sometimes called the split-plot error.

depending on the assumptions the researcher wishes to make about the ordering of priorities among the independent variables (Nie et al., 1975). The present study used a conservative approach, which adjusted each term for all the other terms in the model. The procedure produces results that require no assumptions about priorities among independent variables, or about terms in the model (e.g., interactions versus main effects). This procedure also produces results in which there is no confounding between terms of the model, because the confounded variance is eliminated by the adjustment process (Bryce & Carter, 1974). However, this approach is somewhat more conservative than other methods of partitioning the variance, and it may make it more difficult to find statistical significance.

When many dependent variable measurements are made, multivariate analysis of variance is a useful tool that can be used to reduce the Type I error that is associated with making multiple F tests with a large number of univariate analyses of variance. Unfortunately, appropriate multivariate analysis of variance software was not available to the researchers at the time the data analysis was conducted. However, the researchers were aware of the problem of the inflation of Type I error with multiple tests, and they kept careful track of the number of significant effects expected by chance alone.

## RESULTS

### Leaders' Reactions to Courses

At the conclusion of the training course, commanders rated how much they learned from each topic covered in the curriculum; these ratings are shown in Table 3. Also in Table 3, the commanders' preferences for topic areas in the current study are compared with their preferences in the earlier preliminary evaluation of this same curriculum. It is apparent from Table 3 that the topics that commanders enjoyed in the two different classes were not always the same. In fact, "Games" and "Commander's Role" seemed to be the only topics rated at the top in both classes. Commanders did not indicate they learned much in the "Black American," "Stereotypes," or "Understanding Surveys" sections in either class. The commanders did indicate that they learned a great deal with the block of instruction on leading small group discussions. The interest shown by commanders for the history sections on Mexican Americans and Puerto Ricans, more in the second class than in the first, may have been due to the fact that there were more soldiers from these ethnic groups at the installation where the second class was presented, and two of the four instructors in the second class were Mexican American. It should be noted that the topics were presented in a different order in the two classes, as shown in Table 3.



Table 3  
Commanders' Preferences for Topics in Commanders'  
Curriculum in Two Studies<sup>a</sup>

Topic	Order of Topic Presentation		Preferences for Topics <sup>b</sup>		
	Current Study	Prior Study	Mean <sup>c</sup> Current Study	Rank <sup>d</sup> Current Study	Rank Prior Study
Mexican Americans	1	1	5.5	1	10
Puerto Ricans	2	2	5.2	2	7
Black Americans	3	3	4.1	10	8
Stereotypes	4	4	4.0	11	12
Role Expectations	5	6	3.9	12	4
Games	6	5	5.0	3	5
Resistance to Change	7	8	4.4	6	6
Commander's Role	8	10	4.6	4	3
Approaches to Dealing	9	12	4.3	8	11
Detecting and Dealing	10	9	4.4	6	1
Guidelines for Improved	11	7	4.3	8	2
Capitalizing on Interest	12	13	4.6	4	9
Understanding Surveys	13	11	3.2	13	13
Small Group Discussion Leading Skills	14	not presented in prior study	5.5		

<sup>a</sup>The comparison made here is between the commanders' curriculum in the current study and this same curriculum given in an earlier preliminary study (see Laszlo & McNeill, 1974).

<sup>b</sup>In both studies commanders rated how much knowledge or skill they gained on a scale from "learned a great deal" to "learned nothing."

<sup>c</sup>Ratings were made on an 8-point scale with 8 meaning "learned a great deal."

<sup>d</sup>Topics were given a rank from 1 to 13 according to how favorably they were rated on the above scale with rank 1 the most favorable. The topic "small group discussion skills" was not ranked to make the current study comparable to the prior one. This topic, however, would be tied for first if it were ranked.

At the conclusion of their respective courses, both commanders and first sergeants rated their reactions to the courses that they had just taken, answering the questions shown in Table 4. From Table 4 the leaders' reactions to their respective courses can be compared. It is apparent that the first sergeants' overall reaction to their course was much more favorable than was the commanders' reaction to their course. First sergeants considered their course to be much more worthwhile and interesting than the commanders thought their course was. However, the first sergeants' favorable reaction to their own course did not extend to the Army's Race Relations/Equal Opportunity Program as a whole. Commanders thought the Army's RR/EO Program was more worthwhile than first sergeants did. If the effectiveness of the commanders' and first sergeants' programs were evaluated solely on the basis of favorable reaction by the participants, the first sergeants' program would appear much more effective than the commanders' program. However, self-evaluation by participants may not always be a good way to evaluate a program's effectiveness, as will be shown later.

Table 4  
Comparison of Leaders' Responses to the Commanders'  
and First Sergeants' Programs

Item <sup>a</sup>	Mean		F
	Commanders	First Sergeants	
Do you think this class was worthwhile?			
Very worthwhile--A waste of time	4.8	7.7	10.5**
Do you think this class was interesting or boring?			
Very interesting--Very boring	4.6	7.8	22.8**
Do you think the Army's Race Relations/Equal Opportunity Program is worthwhile?			
Very worthwhile--A waste of time	6.8	5.4	2.7*

\*p < .05.

\*\*p < .001.

<sup>a</sup> Ratings were made on an 8-point scale, with 8 indicating the most favorable response.

### Leader Turnover Rates

As discussed previously, there was a substantial turnover rate among unit leaders during the 5-month period following training. The rates at which leaders were reassigned was expected to be approximately equal in each of the four experimental conditions, particularly since leaders were randomly assigned to the experimental conditions, and the average length of time leaders had been assigned as leaders was approximately equal in each of the experimental conditions. However, the number of turnovers among unit leaders during the first 2 months following training did not appear to be evenly distributed across the four experimental conditions (see Table 5). Six of 11 companies had turnovers in the experimental condition, wherein the first sergeant was trained but the commander was not, and five of the six leaders who were reassigned were first sergeants. When a chi-square statistic was computed to test the significance of the relationship between the number of companies who had turnover within 2 months of training, and whether or not the company's first sergeant was trained, the result was almost significant ( $\chi^2 (1) = 2.81, p < .10$ ). When only the companies who had untrained commanders were considered, the relationship between whether or not the first sergeant was trained, and the turnover rate specifically among first sergeants, was statistically significant ( $\chi^2 (1) = 4.10, p < .05$ ). These results indicate that first sergeants were reassigned at a higher rate when they had received training but the commander had not. By itself this statistic does not speak favorably for the first sergeants' program, and this effect was certainly not intended. The effect is of marginal statistical significance and could be due to chance.

### Evaluation Exercise Results

Two months after the training programs, both trained and untrained commanders and first sergeants completed an evaluation exercise in which they made a variety of recommendations about the type of training that should be received by one black and two white trainees who had poor reading skills. The unit leaders made recommendations about heavy or light duty details and high- or low-stress physical and emotional training that these trainees should receive during training. The leaders also made recommendations about administrative discharges and about the time they had available to interview trainees prior to making any final discharge recommendation. The purpose of this evaluation exercise was to see whether or not the racial harmony training programs would tend to make commanders and first sergeants more patient and help them show more concern for soldiers who were apparently having problems, particularly the soldier who had been indirectly identified as being black on the forms received by the leaders. The leaders' reactions to the black trainee were very nearly identical to their reactions to the two white trainees. For this reason, the analysis focused on the leaders' reactions to the black trainee only.

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Table 5

Turnover Rates Among Unit Leaders During  
Two Months Following Training<sup>a</sup>

Experimental Conditions		Commander Training	
		Trained	Not Trained
First Sergeant Training	Trained	1	6
	Not Trained	2	1

<sup>a</sup>The numbers in each cell reflect the number of companies who had either a commander or first sergeant or both reassigned during the first 2 months following training. Six of 11 companies had turnovers in the experimental conditions where the first sergeant was trained but the commander was not. Five of the six leaders who were reassigned were first sergeants.

Table 6 shows the results of three-way factorial analyses of variance (Commander Training x First Sergeant Training x Turnover) that were computed separately for the commanders' and first sergeants' responses on each of the dependent variables. Table 6 shows that 10 three-way analyses of variance were computed, 5 for commanders and 5 for first sergeants. There are three main effects and four interactions, for a total of seven F tests associated with each of the 10 three-way analyses of variance that were computed. In other words, in all, 70 F tests were made for the analyses summarized in Table 6, and as can be seen from this table, only 2 of these 70 tests were statistically significant at the  $p < .05$  level. When 70 tests are made, between 3 and 4 tests would be expected to be significant at the  $p < .05$  level, by chance alone. Since only 2 tests were actually significant, these can best be interpreted as having been produced by chance. In summary, the results



Table 6

Results of Evaluation Exercise: Impact of Racial Harmony  
Training on Leaders' Reactions to Special Trainees<sup>a</sup>

Variable	Significant Effects for Two Response Groups <sup>b</sup>	
	Commanders	First Sergeants
Duty Detail (Duty details were rated according to whether they were time consuming and undesirable, or less time consuming and more desirable).	none	none
High Stress Physical Training (Frequency with which trainee would undergo vigorous physical exercise).	none	AxBxC
High Stress Emotion Training (Frequency with which trainee would undergo vigorous criticism by drill instructors).	none	A
Time Available for Interviewing Trainee (Interview to take place prior to discharge recommendation).	none	none
Leaders' Administrative Discharge Recommendation.	none	none

<sup>a</sup>Analyses are based on leaders' recommendations for the black trainee only. Leaders reactions to all three trainees (one black, two white) were very nearly identical.

<sup>b</sup>Three-way factorial analyses of variances (as shown in Table 2) were computed separately for commanders' and first sergeants' responses. The main effects in these analyses were labeled Commander Training (A); First Sergeant Training (B); and Turnover (C). Effects statistically significant beyond the  $p < .05$  level are shown.

indicate that the training programs had no effect on the commanders' and first sergeants' responses in the evaluation exercise.

It should be noted in passing that the majority of the commanders and first sergeants recommended very frequent administration of high-stress physical and emotional training. On a 6-point scale ranging from "every day" to "never," the average responses were close to the two most frequent points along the scale.

#### Administrative Action Results

Records of administrative action were analyzed to see whether or not the leaders' training programs influenced the frequency of disciplinary action taken against black and white enlisted soldiers within each company (i.e., Article 15's, administrative discharges) as well as the apprehension rates of soldiers within these companies by military police. These measures of administrative action reflect the actions of both the leaders and their subordinates. Records of the frequency of these administrative actions were kept, by company and by race. Military police reports were available by race for serious (i.e., nontraffic) offenses only. Rates of administrative action by company and race were computed by dividing the frequency that the group in question received each type of administrative action, during the time in question, by the number of individuals belonging to that group.

Split-plot and factorial analyses of variance, following the design shown in Table 2, were computed to test whether the training programs influenced the frequency of disciplinary administrative action. It was hoped that the training programs would reduce the necessity for disciplinary action by providing leaders with techniques for increasing communication and morale, and methods for handling problem situations short of formal punishment. The training programs would also, it was hoped, have the effect of reducing any racial discrimination that might exist in the administration of these actions. For example, blacks in this sample received Article 15's at a somewhat higher rate than did whites (see Hart, 1978). Covariance analysis was used to test whether the differences in the rates at which blacks and whites received these administrative actions were greater and favored whites more in the untrained groups than in the trained groups. The black rate was the dependent variable, and the white rate was the covariate in these analyses. Table 7 shows the results of the split-plot, factorial, and covariance analyses. It is apparent from Table 7 that the training programs did not influence the disciplinary administrative actions that were measured in the experiment. Neither did the training programs reduce discrimination by influencing the relative rates in each company that blacks and whites received disciplinary action.

Table 7  
Impact of Racial Harmony Training on Administrative  
Action Related to Discipline

Variable <sup>a</sup>	Significant Effects for Three Types of Analyses <sup>b</sup>		
	Split-Plot	Factorial	Covariance
Frequency of Article 15s by Company and Race	none	none	none
Frequency of Administrative Discharges (Chp 5, 10, 13) by Company and Race	none	none	none
Military Police Reports-- Apprehension Rates for Serious Offenses by Company and Race	none	none	none
Military Police Reports-- Apprehension Rates for All Offenses by Company only	not apply	none	not apply

<sup>a</sup>Rates of administrative action in each company were computed for each company. The number of blacks in a company receiving an action was divided by the number of blacks in that company. Rates were computed in the same way for whites and Spanish.

<sup>b</sup>Split-plot analyses, using the design in Table 2, were computed. Main effects in these analyses included Commander Training (A), First Sergeant Training (B), Turnover (C), and Race (R) of recipient of the administrative action. Factorial analyses of variance using the design in the upper part of Table 2 were computed separately for black, white, and Spanish recipients also. A factorial analysis was computed for MPR data (All Offenses). A covariance analysis was also computed using the factorial design shown in Table 2. The rate that blacks received the administrative action was the dependent variable, adjusted by the white rate as the covariate.



### Leaders' Survey Results

Two months after completion of the training programs, both trained and untrained commanders and first sergeants completed a survey that included the questions and scales shown in Table 8. The survey was designed to measure the impact of the training program on the relevant race-related perceptions and attitudes of the commanders and first sergeants. Three-way factorial analyses of variance, based on the design shown in Table 2, were computed on each of the survey dependent variables shown in Table 8, separately for the responses of both commanders and first sergeants. The independent variables in these analyses included Commander Training (A), First Sergeant Training (B), and Turnover (C). When the dependent variables were scales, scale scores were computed by averaging across all the items that were associated with a particular scale. Table 8 lists each of the effects that were statistically significant beyond the  $p < .05$  level.

In Table 8, analyses were computed twice on each of 24 dependent variables, once for commanders' responses and again for first sergeants' responses. Seven F tests were made in each analysis, producing a total of 336 F tests represented in Table 8. Of these 336 tests, 5% (approximately 17) would be expected to be significant on the basis of chance alone. Actually, 16 of 336 tests that were made in Table 8 were significant, which is close to that predicted to occur by chance. If the significant effects shown in Table 8 were entirely due to chance, however, they should be fairly evenly distributed among each of the seven terms in the analysis of variance design that was used. In Table 8 it is apparent that three main effects due to commanders' training were significant beyond the  $p < .05$  level. Only one such effect would be expected to be significant on the basis of chance alone.

### Enlisted Soldiers' Survey Results

A random sample of enlisted men from each of the participating companies completed a survey 2 months after the leaders' training courses were completed. The sample was stratified by race so that black, white, and Hispanic enlisted men were sampled from each company. Since the unit of analysis in the present experimental design is the company rather than the individual enlisted soldier, the responses of the enlisted soldiers within each company were averaged by race. In other words, the responses of the black, white, and Hispanic enlisted soldiers within each company were averaged for each dependent variable. These averaged scores were then analyzed, using the split-plot design shown in Table 2. When the dependent variables were scales, scale scores were computed by averaging across all items that were associated with a particular scale, prior to averaging across enlisted soldiers of a given race within each company.



Table 8

Impact of Racial Harmony Training on the Survey Responses  
of Commanders and First Sergeants

Survey Questions	Significant Effects for Two Response Groups <sup>a</sup>	
	Commanders	First Sergeants
1. Are race relations seminars in your company worthwhile?	A	none
2. Unit Discipline Scale (12 items. See Appendix C.)	A	none
3. Race Relations Policies Scale for Companies (Self-Rating on 5 items, See Appendix C.)	A	C, AxB
4. Does social discrimination exist in your company?	none	BxC
5. On the average, how often do you attend race relations seminars in your company?	AxB	none
6. Suppose we were at war, and your job was to take your present company into a dangerous battle zone where the chance of each soldier surviving was 50/50 (50%). Would the enlisted men (E1-4) in your present company follow their company commander and first sergeant into this battle zone if they knew ahead of time that there was a 50/50 (50%) chance they would be killed?	BxC	none
7. Suppose a typical enlisted man (E1-4) in your unit was promoted into your job, replacing you. Would he do your job better than you are doing it now?	AxBxC <sup>b</sup>	none
8. Suppose a typical enlisted man (E1-4) in your unit was promoted into your job, replacing you. Would he do a better job at <u>race relations</u> than you are doing now?	none	none
9. In your company, how good a chance do black enlisted men have for promotion to higher grades as compared to white enlisted men?	none	none

Table 8 (continued)

Survey Questions	Significant Effects for Two Response Groups <sup>a</sup>	
	Commanders	First Sergeants
10. Equality (Value from 7-item Value Survey)	none	none
11. Hostility Scale (Leaders' reactions to black enlisted men on 11 items, see Appendix C)	none	none
12. Hostility Scale (Leaders' reactions to white enlisted men on 11 items, see Appendix C)	none	none
13. Overall, do you feel that racial problems exist in your unit?	none	none
14. About how many enlisted men were promoted to grade E3 or to grade E4 within the last 8 weeks?	none	none
15. How many of the enlisted men who were promoted to E3 or E4 in your company in the last 8 weeks are minority soldiers?	none	none
16. Overall, how effective do you feel you have been as a company commander or first sergeant in dealing with racial problems in your unit?	none	none
17. Do you hear Whites in your company refer to Blacks as "nigger" or "coon?"	none	none
18. Do you hear Blacks in your company refer to Whites in such terms as "honky" or "rabbit?"	none	none
19. On the average, how long do the race. relations seminars in your company last?	none	none
20. Within the last 8 weeks, how many race relations seminars has the typical enlisted man (E1-4) attended in your company?	none	none

Table 8 (continued)

Survey Questions	Significant Effects for Two Response Groups <sup>a</sup>	
	Commanders	First Sergeants
21. Do unit leaders (including platoon sergeants) try to uncover the problems and complaints that exist in your company by talking with the enlisted men (E1-4)?	none	none
22. In your company, are the enlisted men (E1-4) willing to open up to the company commander and first sergeant to let these leaders know how they really feel?	none	none
23. Do you feel your integrity has been questioned within the last 8 weeks by someone in race relations?	none	none
24. Have you experienced mental conflict about race relations within the last 8 weeks?	none	none

<sup>a</sup>Three-way factorial analyses of variance (as shown in Table 2) were computed separately for commanders' and first sergeants' responses. The main effects in these analyses were labeled Commander Training (A); First Sergeant Training (B); and Turnover (C). Effects statistically significant beyond the  $p < .05$  level are shown.

<sup>b</sup>All main effects and interactions were significant here, but all significant effects were due to one very deviant mean in one cell where the sample size was  $N = 1$ , i.e., likely a chance effect.

The purpose of the survey for enlisted soldiers was to see whether or not the racial harmony training program for leaders had a beneficial effect on the attitudes and perceptions of enlisted soldiers subordinate to these leaders, and to see whether or not the effect of this training was different for soldiers from different racial groups. The survey for enlisted soldiers contained many of the same questions and scales as the survey for the leaders. Table 9 lists the questions and scales as well as the effects that were statistically significant beyond the  $p < .05$  level. Statistically significant effects are based on the split-plot design shown in Table 2. With this design, the effects of the training programs can be assumed to be similar (not significantly different) for black, white, and Hispanic enlisted soldiers, if no significant training by race interactions occurred. The effects of the training programs were examined separately for each racial group only when significant training by race interactions occurred.

The results of split-plot analyses on 25 dependent variables are shown in Table 9. As shown in Table 2, each split-plot analysis contained 15 terms and, consequently, 15 F tests. Some 375 F tests were made with 25 dependent variables. Some 5%, or approximately 19, of these 375 tests would be expected to be significant on the basis of chance alone. Table 9 shows that 23 tests were actually significant, which is not far from what would be expected on the basis of chance. However, if chance alone were responsible, the significant effects should have been fairly evenly distributed across the 15 terms in the model. Instead, more significant main effects for Commander Training (A) and Race (R) were formed than would have been expected on the basis of chance. Five significant main effects for commander training were found when approximately one would have been expected on the basis of chance, and six significant main effects for race were found when (again) one would have been expected by chance.

#### Significant Effects Due to Commanders' Training

The results from Tables 8 and 9 indicate that there were more significant main effects due to commanders' training than could have been expected on the basis of chance. With both the leaders' and enlisted soldiers' survey data, there were eight significant main effects due to Commander Training (A), whereas two or three main effects would have been expected by chance. Also, if these eight significant effects of commander training were due to chance alone, then about half of the differences between means should be in a direction favorable to the commanders' program and the other half in an unfavorable direction. The significant main effects due to Commander Training (A) are listed in Table 10, with the means for the trained and untrained groups and the associated F ratios. Table 10 shows that all the significant differences due to Commander Training were in a direction favorable to this training program, a result not likely due to chance.



Table 9  
Impact of Leaders' Racial Harmony Training on the Survey  
Responses of Enlisted Soldiers

Survey Questions	Significant Effects <sup>a</sup>
1. Are race relations seminars in your company worthwhile?	A
2. Is your company commander effective in leading race relations seminars?	A
3. Hostility Scale (Enlisted soldiers reactions to <u>commander</u> on 11 items. See Appendix C).	A, AxBxC
4. Suppose we were at war and your present company commander and first sergeant had the job of taking your company into a dangerous battle zone where the chance of each soldier surviving was 50/50 (50%). Would you follow your company commander and first sergeant into this battle zone if you knew ahead of time that there was a 50/50 (50%) chance that you would be killed?	A, C, AxB
5. Suppose you were promoted into your company commander's job replacing him. Would you do his job better than he is doing it now?	A, R
6. In your company, how good a chance do black enlisted men have for promotion to higher grades as compared to white enlisted men?	B, R
7. Race Relations Policies Scale for companies (Enlisted soldiers evaluation of <u>commander</u> on 5 items. See Appendix C).	B <sup>b</sup> , C, R
8. Suppose you were promoted into your company commander's job replacing him. Would you do a better job at <u>race relations</u> than he is doing now?	R
9. Suppose you were promoted into your first sergeant's job replacing him. Would you do his job better than he is doing it now?	R

Table 9 (continued)

Survey Questions	Significant Effects <sup>a</sup>
10. Equality (Value from 7-item Value Survey)	R
11. Is your first sergeant effective in leading race relations seminars?	AxR, BxR <sup>C</sup> , AxRxR
12. Race Relations Policies Scale for companies (Enlisted soldiers evaluation of <u>first sergeant</u> on 5 items. See Appendix C).	CxR
13. Overall, do you feel that racial problems exist in your unit?	AxC
14. Suppose you were promoted into your first sergeant's job replacing him. Would you do a better job at <u>race relations</u> than he is doing now?	AxBxCxR
15. Overall, how effective do you think your company commander has been in dealing with racial problems in your unit?	none
16. Overall, how effective do you feel your first sergeant has been in dealing with racial problems in your unit?	none
17. Do you hear whites in your company refer to Blacks as "nigger" or "coon?"	none
18. Do you hear Blacks in your company refer to Whites in such terms as "honky" or "rabbit?"	none
19. On the average, how long do the race relations seminars in your company last?	none
20. Within the last eight weeks, how many race relations seminars have you attended in your company?	none
21. Do unit leaders (including platoon sergeants) try to uncover the problems and complaints that exist in your company by talking with the enlisted men (E1-4)?	none

Table 9 (continued)

Survey Questions	Significant Effects <sup>a</sup>
22. Are you willing to open up to the company commander and first sergeant to let them know how you really feel?	none
23. Does racial discrimination exist in your company?	none
24. Hostility Scale (Enlisted soldiers reactions to <u>first sergeant</u> on 11 items. See Appendix C).	none
25. Unit Discipline Scale (12 items. See Appendix C).	none

<sup>a</sup>Significant effects are based on the split-plot (repeated-measures) design shown in Table 2, with four main effects. The main effects in these analyses were labeled Commander Training (A); First Sergeant Training (B); Turnover (C); and Race of the enlisted soldiers (R). Race was treated as the repeated-measures factor. Effects statistically significant beyond the  $p < .05$  level are shown.

<sup>b</sup>This effect was just under the level required for significance with all enlisted men in a split-plot analysis. However, this effect was statistically significant for black enlisted men in a three-way, factorial analysis.

<sup>c</sup>The interactions of the training effects A and B with race R, indicate that the effects of training were different for the three racial groups. Separate three-way analyses of variance were computed for black, white, and Spanish enlisted men to identify these different training effects. These analyses, showed the training effects A and B to be significant only for Spanish enlisted soldiers.

Table 10  
Statistically Significant Main Effects for Commander  
and First Sergeant Training

Survey Questions	Response Range		Mean Responses		E(1,37)
	Favorable	Unfavorable	Trained	Untrained	
Main Effects for Commander Training (A) based on Commanders' Survey Responses					
1. Are race relations seminars in your company worthwhile?	8	1	6.6	5.3	4.38*
2. Unit Discipline Scale	8	1	5.9	4.9	10.12**
3. Race Relations Policies Scale (Self ratings)	8	1	7.6	6.8	5.46*
Main Effects for Commander Training (A) based on Enlisted Soldiers' Survey Responses					
4. Are race relations seminars in your company worthwhile?	8	1	4.0	3.2	9.58**
5. Is your company commander effective in teaching race relations seminars?	6	1	3.7	3.0	4.44*
6. Hostility Scale (Enlisted soldiers' reaction to their commander).	8	1	4.9	4.2	4.33*
7. Would you follow your leaders into a dangerous battle zone if you knew ahead of time that there was a 50% chance that you would be killed? (See Table 9 for exact wording).	8	1	5.5	4.7	4.11*
	8 = willingly follow 1 = refuse to follow at all				
8. If you were promoted into your commander's job, would you do his job better than he is doing it? (See Table 9 for exact wording).	I would probably do...		3.3	2.7	6.97*
	1 = much better than him 3 = the same as him 5 = much worse than him				



Table 10 (continued)

Survey Questions	Response Range		Mean Responses		F(1,37)
	Favorable	Unfavorable	Trained	Untrained	
Main Effects for First Sergeant Training (B) based on Enlisted Soldiers' Survey Response:					
9. In your company, how good a chance do black enlisted men have for promotion to higher grades as compared to white enlisted men?	5 = whites have a much better chance on the average 3 = chances are equal for blacks and whites 1 = blacks have a much better chance on the average		3.5	3.2	4.41*
10. Race Relations Policies Scale (Black enlisted soldiers evaluation of commander).	8	1	4.4	5.1	4.20*

\*  $p < .05$ \*\*  $p < .01$

These results indicate that the commanders who had been trained felt that (a) race relations seminars in their companies were more worthwhile, (b) discipline within their companies was better, and (c) their own racial policies were more favorable, than did commanders who had not been trained. Enlisted men (E1-E4) subordinate to the commanders who had been trained felt that race relations seminars in their own companies were more worthwhile than did enlisted men who were in companies led by untrained commanders.

In short, both commanders and enlisted soldiers agreed that race relations seminars were more worthwhile when the commander had received training. Enlisted soldiers also felt that their commander was more effective in leading race relations seminars when the commander had been trained than when he had not. Enlisted soldiers expressed less hostility (and more positive feelings) toward commanders who had been trained than toward those who had not and expressed a greater willingness to follow their leaders into a dangerous battle zone when their commanders had been trained rather than not trained. Enlisted men were also asked to estimate whether or not they could do a better job than their commander at his job if they had the chance to do it. Enlisted soldiers, on the average, felt their commander could do a better job than they could when their commander had been trained, but felt they could do a better job than their commander when he had not been trained. In summary, the commanders' training program seems to have improved the quality of race relations seminars, and improved the feelings that enlisted soldiers had about their commanders.

#### Training Effects Not Significant

Preliminary Evaluation of Commanders' Program. In many cases, it is as informative to point out what is not statistically significant as it is to identify what is significant. In the preliminary evaluation of the commanders' training program (Laszlo, McNeill, & Thomas, 1978), enlisted soldiers rated trained commanders more favorably on the Racial Policies Scale than untrained commanders. In the present evaluation, enlisted soldiers did not rate trained commanders more favorably on the Racial Policies Scale. In the preliminary evaluation, enlisted soldiers rated the trained commanders as more effective in dealing with racial problems, but in the present evaluation enlisted soldiers did not rate the trained commanders as more effective in dealing with racial problems (Question 15, Table 9). The results of the present evaluation experiment are probably the more accurate. The finding in the preliminary evaluation that trained commanders were seen by subordinates as being more effective and having better racial policies may have been due to design problems rather than to the commanders' training program.

Attendance at Race Relations Seminars. Although the commanders' training program did improve the quality of race relations seminars (Question 1, Tables 8, 9, 10), unfortunately that training did not significantly improve the frequency or the levels of attendance at these seminars. An Army-wide analysis of the unit race relations training program indicated a serious attendance problem at monthly seminars (Hiett & Nordlie, 1976). By regulation, every soldier should attend a race relations seminar every month. In an Army-wide sample, 38% of the soldiers surveyed had not attended a seminar within 2 months, which indicates at least that many soldiers were not trained as frequently as required by regulation. A similar result was found in the present sample: 43% of the enlisted soldiers (E1-E4) indicated that they had not attended a seminar within the last 2 months. Only 56% of the companies in the present sample had an average enlisted response in that company indicating attendance at RAP seminars at a level of at least once in the previous 2 months. The enlisted soldiers' reports about how frequently they attended race relations seminars contrasted dramatically with the commanders' and first sergeants' reports about how frequently enlisted men under them attended these seminars. In the present study, all the commanders and first sergeants said the typical enlisted man in their company had attended at least one race relations seminar in the previous 2 months (Question 20, Table 8). The average response of commanders and first sergeants indicated soldiers attended twice in the previous 2 months, as required by regulation.

First Sergeants' Training Program. It is apparent from the results of the survey data shown in Tables 8 and 9 that the first sergeants' training program was not effective. Between two and three significant main effects due to First Sergeant Training (B) would have been expected in Tables 8 and 9 on the basis of chance alone, and in fact two significant main effects were found, as expected by chance. The two significant main effects are listed at the bottom of Table 10. An examination of the means for these two significant effects reveals that the differences between means were in a direction unfavorable to the first sergeants' program.

The commanders' racial policies looked less favorable to the enlisted soldiers when the first sergeants were trained than when they were not. This result may be consistent with the high turnover (marginally significant) among some trained first sergeants--who may have said some unfavorable things about their commanders.

Also, black enlisted soldiers perceived greater racial discrimination in promotion opportunities when first sergeants were trained than when they were not. This negative result may be of particular concern; feelings about discrimination in the area of promotions constitute the one area in which past research has shown that large differences exist between the perceptions of blacks and whites (Brown, Nordlie, & Thomas, 1977). Blacks perceive a great deal of racial



discrimination in promotions, and whites do not. The greatest racial differences found in the present study concerned this same discrimination in promotions (see Question 4, Table 11). These two negative effects can best be interpreted as having been due to chance. However, if an attempt were made at interpretation, the interpretation would have to be unfavorable.

The reason for the lack of effectiveness in the first sergeants' program becomes clearer on examination of the results of Questions 21 and 22 in Tables 8 and 9. Commanders, first sergeants, and enlisted soldiers all agree that trained first sergeants and their first-line supervisors did not interview enlisted soldiers any more than untrained first sergeants and their first-line supervisors. All parties also agreed that enlisted men were no more willing to open up to leaders (and tell about problems) in companies that had received training than in companies that had not. It is apparent, from this and other data, that most of the trained first sergeants did not actually conduct the seminars that they were supposed to conduct with their first-line supervisors (E5-E7) and with their enlisted soldiers (E1-E4) that would have been necessary to implement COCAP the way it was supposed to have been done.

Visual aids were prepared for first sergeants to conduct these seminars and were placed in a central location. First sergeants who actually conducted the seminars had to check the visual aids out from this central location. From this and from conversations with first sergeants it became apparent that only 3 of the 22 first sergeants who received training actually implemented COCAP by conducting the appropriate seminars with their subordinates. The high turnover rate among some of the trained first sergeants may have been partly due to the first sergeants' failure to actually implement the COCAP program as they were supposed to do.

#### Racial Differences

Table 9 clearly shows that more racial differences in enlisted soldiers' survey responses were identified than were expected on the basis of chance. Six differences were identified versus only one expected by chance. These six racial differences are listed in Table 11, along with the mean responses and F ratios.

The racial differences identified in Table 11 seem to indicate that a higher level of conflict existed between the low-ranking black enlisted men and their company commander (who was usually white) than between the white enlisted men and their commander. On the first three questions, black enlisted soldiers indicated they could do their leaders' jobs better than the leaders could do these jobs themselves; whites and Hispanics felt this way less than black enlisted soldiers. If a



Table 11  
Racial Differences in Enlisted Soldiers'  
Survey Responses<sup>a</sup>

Survey Questions	Response Range		Mean Responses			
	Favorable	Unfavorable	Black	White	Hispanic	F(2,74)
1. If you were promoted into your commander's job would you do his job better than he is doing it? (See Table 9 for exact wording.)	I would probably do... 1=much better than him 3=the same as him 5=much worse than him		2.6	3.0	3.3	6.13**
2. If you were promoted into your commander's job, would you do a better job at race relations than he is doing? (See Table 9 for exact wording.)	I would probably do... 1=much better than him 3=the same as him 5=much worse than him		1.9	2.9	2.4	8.61***
3. If you were promoted into you first sergeant's job, would you do his job better than he is doing it? (See Table 9 for exact wording.)	I would probably do... 1=much better than him 3=the same as him 5=much worse than him		2.9	3.3	3.6	4.77*
4. In your company, how good a chance do black enlisted men have for promotion to higher grades as compared to white enlisted men?	5=Whites have a much better chance 3=Chances are equal for blacks and whites 1=Blacks have a much better chance		3.8	2.9	3.3	21.76***
5. Race Relations Policies Scale (Enlisted soldiers evaluation of commander.)	8	1	4.7	5.3	5.4	4.58*
6. Equality (Value from 7-item Value Survey)	1	7	2.8	3.8	2.8	5.60**

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

<sup>a</sup>The significant main effects for Race (R) were presented here. The Race effect is based on the split-plot design shown in Table 2.

subordinate feels that he can do his superior's job better than the person in the job, it indicates conflict between the parties involved; it also indicates dissatisfaction in the subordinate group that feels it can outperform the superior. The feeling among blacks that they could outperform their superiors was coupled with the feeling that these superiors were discriminating against them in promotion opportunities (Question 4, Table 11). This is, again, indicative of a higher level of conflict between blacks and their superiors than between whites and their superiors. Both blacks and Hispanics valued Equality more than whites did (Question 6, Table 11). At the same time, black enlisted soldiers felt commanders were less effective at implementing practices leading to equality than did white or Hispanic enlisted soldiers. This conclusion is based on the enlisted soldiers' evaluation of their commander on the Racial Policies Scale. If black enlisted soldiers see their commander deviating from values that are important to black soldiers (i.e., equality) more than white soldiers see their commander deviating from important values, it once more indicates racial conflict.

The commanders' training program may have reduced conflict between commanders and subordinates in one sense, by increasing the enlisted soldiers' estimates of how well their commander could perform his job compared to how well they could do it themselves (see Question 8, Table 10).

#### DISCUSSION

The results of the evaluation experiment indicated that neither the commanders' nor the first sergeants' training programs influenced the administration of military discipline (Article 15's, administrative discharges) or offense rates among soldiers (military police reports). Neither training program influenced the leaders' reactions to a black trainee who was experiencing reading problems. The training programs did not influence the results of this evaluation exercise. However, the survey data indicated that favorable results could be attributed to the commanders' training program. Two months after training, commanders who had been trained felt that (a) race relations seminars in their companies were more worthwhile, (b) discipline within their companies was better, and (c) their own racial policies were more favorable, than did commanders who had not been trained. Apparently the trained commanders had taken some positive action in the area of race relations, since enlisted soldiers subordinate to the trained commanders noticed some positive changes.

Two months after training, enlisted soldiers subordinate to trained commanders felt that (a) their commanders were more effective in leading race relations seminars and (b) race relations seminars in their companies were more worthwhile than did enlisted soldiers who

were under untrained commanders. Enlisted soldiers subordinate to trained commanders expressed less hostility toward their commanders and expressed a greater willingness to follow their leaders into a dangerous battle zone than did soldiers under untrained commanders. Finally, enlisted soldiers under trained commanders were less likely to think they could do their commander's job better than the commander could himself. While these survey data indicated that some favorable effects could be attributed to the commanders' training program, the same survey data indicated that no favorable effects could be attributed to the first sergeants' training program. In fact, the evidence indicated that the first sergeants had not actually conducted seminars with their first-line supervisors (E5-E7) and enlisted soldiers (E1-E4), as they had been instructed to do, to implement the COCAP program.

The results indicating the relative effectiveness of the two training programs are somewhat paradoxical in light of the trained leaders' initial reactions to their respective programs. At the conclusion of the COCAP training, first sergeants rated this training very favorably--as very interesting and worthwhile--and commanders rated their own training program at the conclusion of training much less favorably. It is common practice to evaluate the effectiveness of training programs based on how favorably the participants react to the material. If this criterion were used to evaluate the relative effectiveness of the company commanders' and first sergeants' training courses, then unquestionably the first sergeants' course would have been selected as effective, while the commanders' course would have likely been scrapped as unproductive. However, the results of the evaluation experiment indicated that the commanders' course had at least a moderately favorable impact on companies that had trained commanders, but the first sergeants' course did not have a favorable impact on the companies that had trained first sergeants. These results indicate that it can be dangerous to evaluate the effectiveness of a training program on the basis of the subjective reactions of the participants alone, since these reactions may not always correspond with the results of other relevant evaluation data.

The paradoxical result that the commanders' course proved to be moderately effective, in spite of the fact the commanders who received training reacted somewhat unfavorably to the course, might be explained by the following possibility. Commanders may have been motivated to improve their performance in race relations by the implicit direction in the course for commanders to examine their priorities as well as their performance in this area. This self-examination may have provided the necessary motivation for self-improvement in this area. Several commanders mentioned that the course was highly motivating. Rokeach (1973) has used a self-examination approach to provide motivation for change in the area of race relations. Experimental subjects would examine the priorities they placed on values like Equality and compare them with actual priorities of a desirable reference group,



with inconsistencies between the subjects' own values and the values of the desirable reference group pointed out. Rokeach (1973) has noted long-term favorable change in values and behavior as a result of the self-dissatisfaction generated by this sort of self-examination. The commanders' training program may have implicitly provoked this sort of self-examination and motivation for change. Self-examination of priorities, of course, may not always be pleasant, and for this reason, the commanders' reaction to the course itself may have been somewhat unfavorable.

The results of the evaluation experiment indicate that the commanders' program was only modestly effective. The program itself has much room for improvement. The one area where leaders and enlisted soldiers agreed that the program was effective was in improving the quality of race relations seminars. A portion of the commanders' program focused on concrete ways to improve race relations seminars, including providing commanders with skills in leading small group discussions. Apparently this portion of the program that provided commanders with concrete, practical, job-related skills was effective. The commanders' program itself may not have taught enough practical skills. To be effective, a program may need to provide practical job-related skills as well as motivation. Motivation without the skills or techniques may not prove effective.

In neither the present nor the preliminary evaluation of the commanders' program did this program affect the administration of discipline, including Article 15's, discharges, etc. If problems arise in the area of minority military justice and discipline, and leadership training is provided to help handle these problems, then a training course should probably provide leaders with specific practical techniques and skills rather than dealing in generalities. The administration of military justice was briefly discussed in the present commanders' course, but only in a very general way.

In short, to improve the commanders' course, more practical, job-related skills and techniques may need to be provided. Also, if motivation for improvement comes through self-examination of priorities, then perhaps future courses could focus more specifically on the commanders' actual priorities, the priorities they would ideally like to have, and the priorities of their superiors and subordinates.

The paradoxical result that the first sergeants' course was not effective, even when the trained first sergeants reacted very favorably to the course itself, might be explained by lack of motivation on the first sergeants' part to actually implement the program. It became apparent that only 3 of the 22 trained first sergeants actually conducted COCAP seminars with their subordinates as they were supposed to do. The lack of motivation demonstrated here may have been due in part to the lack of self-examination required of first sergeants trained



with COCAP. First sergeants were instructed to take the role of model leaders, who did not discriminate, and to reaffirm leadership values that most first sergeants already strongly indorsed. Although this procedure may have made first sergeants feel good, and thus react favorably to the course, it may not have provided the necessary motivation for first sergeants to make the effort to improve their companies. No feelings of self-examination or feelings of self-dissatisfaction were involved. Rokeach (1973) has noted that feelings of self-dissatisfaction were associated with motivation to change in his experiments.

Because of this motivation problem and the failure of first sergeants to conduct seminars with subordinates, COCAP cannot be recommended for implementation on a wider scale, at least as it was implemented in this evaluation experiment. COCAP is a program designed to strengthen the chain of command. Since it deals with the chain of command, it probably creates expectations among both leaders and enlisted soldiers alike that solutions to company problems will follow as a result of the program. If the program is started, creating positive expectations, but not actually implemented the way it should be, then these positive expectations will probably not be realized, unfavorable effects may be produced, and the result may be worse than having no program at all. The author of COCAP (Tucker, 1975a) noted this sort of problem in the plan itself: "The junior enlisted man must be encouraged to actually surface his problems through the chain of command. There is an inherent danger here; the soldier will expect results." Unfavorable effects attributed to the first sergeants' program could be due to positive expectations, created by the program, that were not fulfilled by first sergeants implementing the program the way it should have been done.

Twenty-two companies were involved with COCAP training at the same time, and with this many companies it was not possible for researchers to physically monitor the activities of all these first sergeants to encourage them to comply and to help them. First sergeants did receive a letter from the G3 (training) office directing them to implement this training. Tucker's preliminary work with this program was done with few companies, no more than four at a time, allowing SFC Tucker to monitor their activities and provide assistance as needed. COCAP might be successfully implemented under conditions of close supervision, like that provided by Tucker when it was implemented in the preliminary evaluations (Tucker, 1974).

COCAP may also be useful as a self-help tool for first sergeants who are already motivated and have permission to implement a program of this nature on their own, understanding of course the dangers that may be involved if they fail to follow through with implementing the seminars and fail to take action on the feedback they receive from their subordinates. Because the COCAP program does provide a set of concrete techniques and skills for increasing communication between superiors

and subordinates, it may prove effective for leaders who are already motivated to implement a program of this nature. Several first sergeants actually implemented the COCAP program the way it was supposed to have been implemented, in the current project and in the preliminary evaluations conducted by Tucker (1974). These first sergeants continued to conduct COCAP seminars on an ongoing basis as long as 18 months after they were introduced to the program, or as long as they were in their companies, which indicates that COCAP had some utility for these leaders who actually implemented it.

# REFERENCES

- Bauer, R. G., Stout, R. L., & Holz, R. F. Developing a Conceptual and Predictive Model of Discipline in the U.S. Army. ARI Research Problem Review 76-5, September 1976.
- Brown, D. K., Nordlie, P. G., & Thomas, J. A. Changes in Black and White Perceptions of the Army's Race Relations/Equal Opportunity Program--1972 to 1974. ARI Technical Report TR-77-B3, December 1977.
- Bryce, G. R., & Carter, M. W. MAD--The Analysis of Variance in Unbalanced Designs--A Software Package. In G. Bruckmann, F. Ferschl, & L. Schmetterer (Eds.), Comstat 1974, Proceedings in Computational Statistics. Vienna, Austria: Physica Verlag, ISBN 3 7908 0148 8, 1974.
- Hart, R. J. The Relationship Between Perceived Offense and Actual Discipline Rates in the Military. ARI Research Memorandum 77-30, February 1978.
- Hiett, R. L., & Nordlie, P. G. An Analysis of the Unit Race Relations Training Program in the U.S. Army: Interim Report. (Prepared under contract for Army Research Institute for the Behavioral and Social Sciences.) McLean, Va.: Human Sciences Research, Inc., December 1976.
- Laszlo, J. P., McNeill, J. L., & Thomas, J. A. Racial Harmony Training for Company Commanders: A Preliminary Evaluation. ARI Research Problem Review 78-20, September 1978.
- Nie, N. H., Hall, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. SPSS: Statistical Package for the Social Sciences (2nd ed.). New York: McGraw-Hill Book Co., Inc., 1975.
- Rokeach, M. The Nature of Human Values. New York: The Free Press, 1973.
- Thomas, J. A., McNeill, J. L., & Laszlo, J. P. An Approach to Improving the Effectiveness of Army Commanders in Multi-Ethnic Settings. ARI Research Problem Review 78-19, September 1978.
- Tucker, J. E. U.S. Army Garrison Yongsan Case Study: Lessons Learned April 71-April 73. (Report prepared for Yongsan Army Command.) Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, July 1973.

Tucker, J. E. Report on the Investigation and Resolution of Race Relations Problems in Korea. (Prepared for Human Relations Management Work Unit.) Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, April 1974.

Tucker, J. E. Chain-of-Command Action Plan (COCAP): First Sergeants' Leadership Guide for Positive Chain-of-Command Management. (Prepared for Human Relations Management Work Unit.) Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, September 1975. (a)

Tucker, J. E. Chain-of-Command Action Plan (COCAP): First Sergeants' Leadership Guide for Positive Chain-of-Command Management--Program of Instruction for First-Line Supervisors E5-E7, and for Lower Enlisted Soldiers E1-E4. (Prepared for Human Relations Management Work Unit.) Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, September 1975. (b)



## APPENDIX A

### COURSE OUTLINE FOR COMMANDERS' RACIAL HARMONY TRAINING PROGRAM

#### Topic

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- I. Introduction
  - A. Background Information
  - B. Overview of Course
  - C. Ice Breaker
  - D. Johari's Window
- II. Mexican-Americans: History; Life Styles; Current Status; Relations to White Americans
- III. Puerto Ricans: History; Life Styles; Current Status; Relations to White Americans
- IV. Black Americans: History; Life Styles; Current Status; Relations to White Americans
- V. Common Stereotypes and Interpretations of the Behavior of Minority Group Members
- VI. Role Expectations Blacks and Whites Have for Each Other in Social Relations and the Impact of Their Roles
- VII. The Games Soldiers Play: Destructive Emotions and Gamesmanship as Barriers to Effective Communication
- VIII. Sources of Individual and Organizational Resistance to Change
- IX. The Commander's Role in Groups Working Within the Unit to Improve Race Relations
- X. Approaches to Dealing with Racial Tension
- XI. Detecting and Dealing with Racial Tension
- XII. Guidelines for Improved Interpersonal Relations Between Members of Majority and Minority Groups
- XIII. Capitalizing Upon Interest Within the Unit in Developing a Race Relations Program

APPENDIX A (continued)

XIV. Understanding the Results of Surveys

XV. Small Group Discussion Leading Skills

- A. The Communication Process
- B. The Role of Seminars in RR/EO Programs
- C. Discussion Leading Techniques
- D. Discussion Leading Tools

## APPENDIX B

### CHAIN-OF-COMMAND ACTION PLAN (COCAP) LESSON OUTLINES

#### A. Lesson Plan for First-Line Supervisors (E5-E7)

SUBJECT: Promoting Interpersonal Relations (E5-E7)

The purpose of these classes is to introduce front-line supervisors to interviewing techniques. The interview, as explained, is a means of building inter-personal relations along the chain of command by surfacing troop dissatisfaction and channeling it upwards for solution.

The class must also make first-line military leaders aware of the poor leadership practices which trigger troop dissatisfaction.

#### Discussion Points:

1. The passing through individual vs. the positive careerist; where do you stand?
2. Differentiating between discrimination and prejudice.
3. Identifying specific leadership deficiencies which trigger troop dissatisfaction.
4. Identifying professional leadership traits.
5. The chain of command.
6. Why the chain of command is not used properly by the junior enlisted men.
7. Managerial interviewing as a method of strengthening the chain of command.
  - a. Managerial interviewing techniques
  - b. The need to maintain trust.
  - c. Dealing with hostile behaviors through interviewing procedures.
  - d. Encouraging the soldier to use the chain of command through effective interviewing.

An hour of each class should be devoted to practice interviewing. Allow students to practice on each other role-playing hostile attitudes and behaviors. Discussion of practice interviews should be encouraged to share practical experience and pinpoint mistakes.

Above all, each student will be required to interview three of their personnel in grades E1-E4, to gain proficiency in interviewing and to surface actual problems. Two weeks should be allowed for accomplishing this. After this period, the First Sergeant will hold NCO meetings with the participating students to evaluate the success of the project. Problems uncovered during the project which could not be handled by first-line leaders should be discussed and solutions recommended and/or tried out. This action is the essential part of the Chain-Of-Command Action Plan (COCAP). It must be emphasized that the COCAP is not just a series of seminars; it is the unit's action plan for strengthening the chain of command.

B. Lesson Plan for Enlisted Soldiers (E1-E4)

SUBJECT: Promoting Interpersonal Relations (E1-E4)

The purpose of the E1-E4 seminars is to encourage the lower ranking enlisted soldier to use the chain of command properly. This is accomplished mostly by explaining the dual nature of the chain of command, directives and policies coming down and feedback going up (chain of response). The lower ranking enlisted soldier is at the top of this "chain of response" and is therefore the solution to many of his problems.

At the same time, the seminar will promote self help, where appropriate, and responsibility. This is accomplished by surfacing sample problems from the group and showing how they can be channeled through the chain of command for solution. In dealing with hostile attitudes from the group, or bitterness toward supervisors, it should be emphasized that their cooperation is essential for making the program work. Past experience and inadequacies should be forgotten; a fresh start should be made.

Discussion Points:

1. The passing through individual vs the positive careerist; where do you stand?
2. Differentiating prejudice and discrimination.
3. Identifying specific leadership deficiencies and discriminatory acts.
4. Identifying professional leadership traits.
5. Why the chain of command is misused or distrusted by the junior enlisted soldier.
6. The chain of response.



7. How the chain of command can help the soldier,
  - a. surfacing dissatisfactions,
  - b. handling complaints,
  - c. assisting the soldier in realizing his maximum potential.
8. The role of the soldier in attaining and maintaining good-interpersonal relations within his unit.
9. Using the chain of command to improve interpersonal relations with military leaders.

At least an hour should be spent in surfacing actual dissatisfaction and complaints. It must be demonstrated clearly how these problems can be channeled through the chain of command. The junior enlisted soldier must then be encouraged to actually surface his problems through the chain of command. There is an inherent danger here; the soldier will expect results. It must be explained that solutions to problems must be negotiated to everyone's advantage.

APPENDIX C  
SURVEY RATING SCALES

Section I. Racial Policies Scale

A. Scale for Enlisted Soldiers

Answer the following questions by CIRCLING A NUMBER FOR EACH QUESTION.  
(Note: Questions 1 and 4 were reverse coded, so that a high number on the scale reflected favorable racial policies.)

1. Does your (company commander, first sergeant) allow language in your company that some people find racially offensive?  
Never 1 2 3 4 5 6 7 8 Very frequently
2. Does your (company commander, first sergeant) emphasize to everyone in your unit a policy of treating each individual equally and fairly?  
Very much 8 7 6 5 4 3 2 1 Not at all
3. Does your (company commander, first sergeant) encourage enlisted men and officers to participate actively in race relations seminars or councils?  
Not at all 1 2 3 4 5 6 7 8 Very much
4. Does your (company commander, first sergeant) feel uncomfortable talking about racial issues and wait for others to bring up the subject before talking about racial issues?  
Very much 8 7 6 5 4 3 2 1 Not at all
5. Does your (company commander, first sergeant) encourage everyone in the unit to discuss complaints of on- and off-post discrimination with him?  
Not at all 1 2 3 4 5 6 7 8 Very much

B. Scale for Unit Leaders

1. Do you allow language in your company that some people find racially offensive?  
Never 1 2 3 4 5 6 7 8 Very frequently
2. Do you emphasize to everyone in your unit a policy of treating each individual equally and fairly?  
Very much 8 7 6 5 4 3 2 1 Not at all

# APPENDIX C (continued)

3. Do you encourage all enlisted men and officers to participate actively in race relations seminars or councils?

Not at all    1    2    3    4    5    6    7    8    Very much

4. Do you feel uncomfortable talking about racial issues and wait for others to bring the subject up before talking about racial issues?

Very much    8    7    6    5    4    3    2    1    Not at all

5. Do you encourage everyone in the unit to discuss complaints of on- and off-post discrimination with you?

Not at all    1    2    3    4    5    6    7    8    Very much

## Section II. Hostility Scale

### A. Scale for Enlisted Soldiers

Think about the behavior of your (company commander, first sergeant). What does his behavior make you feel like doing to him?

He makes me want to . . .

Trust him	8	7	6	5	4	3	2	1	Suspect him
Honor him	8	7	6	5	4	3	2	1	Dishonor him
Punish him	1	2	3	4	5	6	7	8	Reward him
Avoid him	1	2	3	4	5	6	7	8	Approach him
Save him	8	7	6	5	4	3	2	1	Discredit him
Discharge him from the Army	1	2	3	4	5	6	7	8	Retain him in the Army
Disobey him	1	2	3	4	5	6	7	8	Obey him
Love him	8	7	6	5	4	3	2	1	Hate him
Increase his authority	8	7	6	5	4	3	2	1	Reduce his authority
Control him	1	2	3	4	5	6	7	8	Free him
Get angry at him	1	2	3	4	5	6	7	8	Not get angry at him



## APPENDIX C (continued)

### B. Scale for Unit Leaders

Think about the behavior of the (black, white) enlisted men in your company. What does their behavior make you feel like doing to them?

They make me want to . . .

Trust them	8	7	6	5	4	3	2	1	Suspect them
Honor them	8	7	6	5	4	3	2	1	Dishonor them
Punish them	1	2	3	4	5	6	7	8	Reward them
Avoid them	1	2	3	4	5	6	7	8	Approach them
Save them	8	7	6	5	4	3	2	1	Discredit them
Discharge them from the Army	1	2	3	4	5	6	7	8	Retain them in the Army
Disobey them	1	2	3	4	5	6	7	8	Obey them
Love them	8	7	6	5	4	3	2	1	Hate them
Increase their authority	8	7	6	5	4	3	2	1	Reduce their authority
Control them	1	2	3	4	5	6	7	8	Free them
Get angry at them	1	2	3	4	5	6	7	8	Not get angry at them

### Section III. Unit Discipline Scale

Please indicate how often members of your company display the following kinds of behavior. (CIRCLE A NUMBER) (Note: Questions 3,4,6,9,11,12 were reverse coded, so that a high number on the scale reflected good discipline.)

1. Do members of your company process paperwork in an efficient manner?

All the time    8    7    6    5    4    3    2    1    Never

2. Do members of your company show up on time?

All the time    8    7    6    5    4    3    2    1    Never



APPENDIX C (continued)

3. Do members of your company fail to work together as a team?  
Never 1 2 3 4 5 6 7 8 All the time
4. Do members of your company display disorderly conduct off-post?  
All the time 8 7 6 5 4 3 2 1 Never
5. Do members of your company cooperate with each other?  
All the time 8 7 6 5 4 3 2 1 Never
6. Do members of your company sit around on duty hours doing nothing?  
Never 1 2 3 4 5 6 7 8 All the time
7. Do members of your company keep living and working areas in clean and orderly condition?  
Never 1 2 3 4 5 6 7 8 All the time
8. Do members of your company get the job done right without needing direct supervision?  
All the time 8 7 6 5 4 3 2 1 Never
9. Do members of your company maintain a low level of combat readiness?  
All the time 8 7 6 5 4 3 2 1 Never
10. Do members of your company do high quality work?  
All the time 8 7 6 5 4 3 2 1 Never
11. Do members of your company fail to maintain and properly wear their uniforms?  
Never 1 2 3 4 5 6 7 8 All the time
12. Do members of your company do just enough work to get by?  
All the time 8 7 6 5 4 3 2 1 Never